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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,769	12/21/2005	Flemming Moller Larsen	1175/74050	1776

7590 10/16/2007
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EXAMINER

WHITE, DWAYNE J

ART UNIT	PAPER NUMBER
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3745

MAIL DATE	DELIVERY MODE
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10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/534,769

Applicant(s)

MOLLER LARSEN ET AL.

Examiner

Dwayne J. White

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12-18 is/are rejected.
- 7) ☒ Claim(s) 8-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

On page 9, line 9, "collector shoe 7" should be --collector shoe 17--.

Claim 3 recites the "limitation the sliding contact connection includes a collector shoe (12) fixedly mounted on the blade root (16), and an electrically conducting contact member (7) in form of a rail mounted on the rotor hub (3)" however this is not disclosed in the Specification or the Drawings. Appropriate disclosure in the Specification is required to support the claimed limitation.

Appropriate correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the collector shoe being fixedly mount on the blade root and the contact member in form of a rail mounted on the rotor hub must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Wobben (WO01/86144 A1). For purposes of translation, the Examiner will be using the National Stage publication US2003/0170122 A1 included in this Office Action for specific references from the disclosure. Wobben discloses a wind turbine rotor including a rotor hub and a plurality of blades 5, and where each blade root 24 is connected to said rotor hub through a pitch bearing (note that while Wobben does not specifically show a pitch bearing, paragraph 0020 states that the device can function in the possible angular positions of the blade and thus implies the pitch bearing) in such a manner that the pitch angle of the blade is adjustable by a turning of the blade about its longitudinal axis relative to the rotor hub, and where the blade is

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provided with at least one electrically conducting lightening down-conductor 7 extending in the longitudinal direction of the blade to the blade root and being electrically isolated from the pitch bearing 5, and where a spark gap (See figure 4, the gap between 11 and 17) is provided between the lightning down-conductor and the rotor hub, said spark gap being adapted to conduct a lightning current passing through the lightning down-conductor, characterized in that a sliding contact connection 9 is provided parallel to the spark gap between the lightning down-conductor and the rotor hub, said sliding contact connection ensuring electrical contact between said lightning down-conductor and said rotor hub irrespective of the pitch angle of the blade (paragraph 0020). The sliding contact connection includes a collector shoe 9 mounted on the rotor hub and an electrically conducting contact member 8 connected to the conductor and extending along a portion of the circumference of the blade root. The Examiner notes that since Applicant is vague on the exact function of the collector shoe, the Examiner takes the position that the shoe simply collection the charge from the lightning and therefore multiple parts of can meet the basic definition gleaned from Applicant's Specification, therefore in regards to claim 3, the sliding contact connection includes a collector shoe 10 fixedly mounted on the rotor hub, and an electrically conducting contact member 8 connected to the lightning down-conductor (6) of the blade and extending along a portion of the circumference of the blade root. Wobben further discloses the lightning down-conductor being connected to a lightning receptor 6 adjacent the tip of the blade. In regards to claims 7, 17 and 18, while Wobben does not specifically disclose the nacelle and rotor shaft, it is clear from Figure 3 that a nacelle is known and a rotor shaft is inherent for the wind turbine rotor. In regards to claim 5, it is the position of the Examiner that the collector shoe and the spark gap member are considered one unit.

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Allowable Subject Matter

Claims 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne J. White whose telephone number is (571) 272-4825. The examiner can normally be reached on 7:00 am to 3:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Dwayne J White
Patent Examiner
Art Unit 3745

DJW


EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
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10/15/07